



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/586,129	07/17/2006	Takayasu Ohara	MAT-8869US	1818
53473	7590	02/16/2010	EXAMINER	
RATNERPRESTIA P.O. BOX 980 VALLEY FORGE, PA 19482			DANG, KET D	
			ART UNIT	PAPER NUMBER
			3742	
			MAIL DATE	DELIVERY MODE
			02/16/2010 PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/586,129

**Applicant(s)**

OHARA ET AL.

**Examiner**

KET D. DANG

**Art Unit**

3742

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 2 and 4-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-2 and 4-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/GS-08)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date 10/30/2009

### **DETAILED ACTION**

1. This office action is responsive to the amendment filed on November 12, 2009. As directed by the amendment: claim 1 has been amended, claim 3 has been cancelled and claims 9-14 have been added. Thus, claims 1-2 and 4-14 are presently pending in this application.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2, 4-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over et al. (US Pub. No. 20040261562 A1) in view of Takayanagi (JP 408057648A) and further in view of Acheson (US 4952769).

4. Regarding claims 1, 9, and 11, Haniya et al. disclose an industrial robot (abstract) capable of being used in a floor-mounted state (see figure 1), comprising: a base for installation 1 (fig. 1); a first arm rotatably attached to the base 2 (fig. 1); a second arm being pivotable with respect to the first arm 4 (fig. 1); a third arm pivotably attached to the second arm 5 (fig. 1); a wire feeder 11 (fig. 1) provided to the second arm and being rotatable around a rotation axis (see R-axis rotation in figure 1); a welding torch 9 (fig. 1); and a torch cable 12 (fig. 1) for feeding a welding wire to the welding torch, the torch cable coupled to the wire feeder (page 2, paragraph 0035); a fourth arm 3 (fig. 1) attached to one side face of the first arm 2 (fig. 1) and one side face

of the second arm 4 (fig. 1), the fourth arm 3 (fig. 1) pivotable with respect to the first arm 2 (fig. 1) and the second arm 4 (fig. 1) (see figure 1, para. 0033-0035).

Haniya et al. fail to disclose a ceiling-mounted state; a feeder cable electrically coupling between an inside of the industrial robot and the wire feeder wherein the rotation axis is composed of a rotating hollow pipe shaft having a first end and a second end opposite the first end, and the feeder cable passes through the rotating hollow pipe shaft from the first end to the second end; and wherein the wire feeder is located opposite to the fourth arm relatively to a rotating axis of the first arm.

However, Takayanagi discloses a ceiling-mounted state (see figure 1; para. 0017); wherein the wire feeder 7 (fig. 1) is located opposite to the fourth arm 34 (fig. 1) relatively to a rotating axis of the first arm 31 (fig. 1). Acheson teaches a feeder cable electrically coupling between an inside of the industrial robot and the wire feeder wherein the rotation axis is composed of a rotating hollow pipe shaft having a first end and a second end opposite the first end, and the feeder cable passes through the rotating hollow pipe shaft from the first end to the second end (col. 16, lines 11-33). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to modify the Haniya's reference, to include a ceiling-mounted state and a wire feeder is rotating around a rotation axis, as suggested and taught by Takayanagi and Acheson, for the purpose of providing a capability of either floor-mounted or ceiling-mounted.

5. Regarding claims 2 and 10, Haniya and Acheson disclose the claimed invention, except for a fixing device including the rotation axis and provided to the second arm.

However, Takayanagi discloses a fixing device 76 (fig. 1) including the rotation axis and provided to the second arm 32 (fig. 1) (para. 0014, 0008-0009, and 0018).

6. Regarding claims 4 and 12, Haniya discloses a rotation fixing part for fixing a rotation angle of the wire feeder (para. 0013).
7. Regarding claims 5 and 13, Haniya and Acheson disclose the claimed invention, except for wherein a position to which the wire feeder is attached is offset to a position apart from the third arm. However, Takayanagi discloses wherein a position to which the wire feeder 7 (fig. 2) is attached is offset to a position apart from the third arm 33 (fig. 2) (see figure 2 for the position of the wire feeder is attached to the side of the 3<sup>rd</sup> arm).
8. Regarding claims 6 and 14, Haniya discloses wherein at least a part of the wire feeder 11 (fig. 1) is located on the second arm 4 (fig. 1) (2<sup>nd</sup> arm is the same as upper arm).
9. Regarding claim 7, Haniya discloses a fourth arm 3 (fig. 1) pivotably attached to the first arm and the second arm 4 (fig. 1).
10. Regarding claim 8, Haniya discloses wherein the fourth arm 3 (fig. 1) is attached to one side face of the first arm 2 (fig. 1) and one side face of the second arm 4 (fig. 1).

#### ***Response to Amendment/Arguments***

11. Applicant's arguments with respect to claims 1-2 and 4-8, and have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KET D. DANG whose telephone number is (571) 270-7827. The examiner can normally be reached on Monday - Friday, 7:30 - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoang Tu can be reached on (571) 272-4780. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/KET D DANG/  
Examiner, Art Unit 3742  
/TU B HOANG/  
Supervisory Patent Examiner, Art Unit 3742